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REMARKS

Claims 36-46 have been cancelled. Claims 1 and 20 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claims 47-55 have been added. Thus, claims 1-35 and 47-55 are now pending in this application. No new matter has been added. In view of the above amendments and the following remarks, it is respectfully submitted that all of the pending claims are allowable.

Claims 1-4, 6, 9, 10, 12-18, 20, 21, 23, 24, 27, 28, 30, and 32-34 stand rejected under 35 U.S.C. § 103(a) as unpatentable over United States Patent No. 6,551,301 to Gijsbers et al. in view of United States Published Patent Application No. 2004/0116798 to Cancro et al. Applicant has amended claim 1 to recite that "the second conduit opens to...permanently prevent the withdrawn CSF from reentering the CNS." Support for this amendment can be found at least in page 9, paragraph [00022], which states that the "removal of CSF, and thus, toxic substances contained therein via the second lumen 120 prevents these toxic substances from being reabsorbed and recirculated and makes it possible to manage levels of these toxins." Further support can be found in Figure 1, which shows that drain conduit 120' is not in fluidic communication with conduit 110' and so is unable to recirculate CSF back into the patient. Moreover, valve 114' prevents a backflow of withdrawn CSF into the patient.

Unlike the method of claim 1, the operation of the Gijsbers cannot achieve its intended therapeutic purpose without recirculating previously withdrawn CSF to the patient. As shown in Figure 1, CSF is withdrawn via conduit 12, treated in ion concentration adjustment mechanism 16, and then reintroduced to the patient via conduit 18. Thus, Gijsbers does not "permanently prevent the withdrawn CSF from reentering the CNS" of a patient. Cancro relates to a method of 3-D brain source localization that does not involve any withdrawal of CSF from a patient. Since Cancro does not overcome the above-noted deficiency in Gijsbers, Applicant respectfully submits that claim 1 is patentable over the combination of Gijsbers and Cancro.

Similarly to claim 1, claim 20 recites a system for treating disorders of the central nervous system (CNS), comprising "first and second conduits, wherein, when in an operative position, distal ends of the first and second conduits open into a portion of a patient's CNS with direct

access to cerebrospinal fluid (CSF) and wherein, when in the operative position, a proximal end of the second conduit opens to drain CSF from the CNS and *permanently prevent the drained CSF from reentering the CNS.*" Thus, it is respectfully submitted that claim 20 is allowable for the same reasons stated above in regard to claim 1.

In addition, Applicant notes that neither Gijsbers or Cancro teaches "a first reservoir implantable within the patient's body..." for holding a material to be introduced into the CSF, as recited in claim 20. Cancro does not relate in any way to withdrawing CSF or treating it with therapeutic agents maintained in reservoirs and so shall not be discussed further. Although the ion concentration adjustment mechanism 16 in Gijsbers treats the ion concentration of withdrawn CSF via "chemical treatment" (column 2, line 52), the chemical used for this treatment is not kept in any reservoir that is implantable inside a body. Since the chemical used by the Gijsbers system to treat CSF is stored outside of the body, Gijsbers does not teach the "first reservoir" of claim 20. Nor is any such implantable reservoir suggested by Gijsbers.

Claims 5, 11, 22, and 29 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Gijsbers in view of Cancro and United States Patent No. 6,436,091 to Harper. Since Harper does not overcome the deficiency noted above with respect to Gijsbers and Cancro, Applicant submits that these claims are patentable for at least the same reason given above in support of the patentability of claim 1.

Claims 7, 8, 25, and 26 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Gijsbers in view of Cancro and United States Published Patent Application No. 2003/0130645 to Brengle et al. ("Brengle"). Since Brengle does not overcome the deficiency noted above with respect to Gijsbers and Cancro, Applicant submits that these claims are patentable for at least the same reason given above in support of the patentability of claim 1.

Claims 19 and 35 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Gijsbers in view of Cancro and United States Patent No. 6,575,928 to Saul et al. ("Saul"). Since Saul does not overcome the deficiency noted above with respect to Gijsbers and Cancro, Applicant submits that these claims are patentable for at least the same reason given above in support of the patentability of claim 1.

In addition, Applicant submits that applying to Gijsbers the teaching of Saul pertaining to

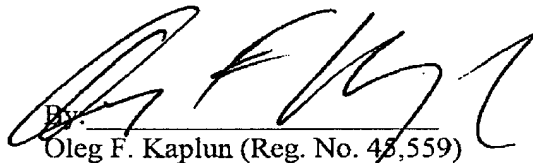
the removal of CSF is inappropriate because Gijsbers teaches away from the CSF drainage path of Saul. As stated above, Gijsbers shows two conduits 12 and 18 that are in fluidic communication with each other. An essential aspect of the Gijsbers system is modifying brain fluid and reintroducing it into the patient. It does so by withdrawing CSF from a patient, treating the CSF using ion concentration adjustment mechanism 16, and re-injecting the treated CSF back into the patient via conduit 18. Column 1, lines 62-67 ("The extracted brain fluid is treated to change the concentration of ions in the fluid...The ion-adjusted fluid is re-injected into the brain into a specific brain structure...."). The recirculation of CSF that is so central to Gijsbers is incompatible with the teachings of Saul, which is focused exclusively on the drainage and discarding of excessive CSF. No re-injecting of CSF back into a patient is done in Saul. Thus, one of ordinary skill in the art would not apply the single path drainage technique of Saul to the Gijsbers system because doing so would break the recirculation path that is essential to achieving the therapeutic purpose of Gijsbers.

Applicant has introduced new claims 47-55. No new matter has been introduced by these new claims, and they are patentable over the art relied on by the Examiner.

All issues raised in the Office Action having been addressed, Applicant respectfully submits that this application is condition for allowance.

Respectfully submitted,

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